ABSTRACT

A bicycle headlamp 1 includes a rotor 3 including a plurality of magnet plates 33 attached to spokes 91 of a wheel of a bicycle 9 along the circumference of the wheel, each magnet plate having the form of an arc of a certain circle and including a plurality of magnets 31 disposed at regular circumferential spacings with alternating south and north poles; a stator 5 including a power-generating coil 53 including a coil and an iron core disposed in a fixed position to face the magnetic pole faces of the magnet plates 33 of the rotor 3; a case containing at least a headlamp electrical circuit 71 for establishing resonance at a frequency synchronized with a certain relative speed of the magnets by means of the power-generating coil 53 of the stator 5 and a capacitor connected in series with the power-generating coil 53 and for rectifying, smoothing out, and outputting electric power obtained from the power-generating coil 53, a light-emitting diode 73 which is lit by the electric power supplied from the headlamp electric circuit 71, and a condenser lens 75 for focusing light emitted from the light-emitting diode in front of the bicycle and for illuminating the roadway.